IN THE CLAIMS

Please cancel claims 1-23, all of the claims in the verified translation, as filed. Please also cancel claims 1-23 as filed under Article 19 on January 28, 2004. Further, please cancel claims 1-16 as set forth in the letter from KBA to the European Patent Office dated July 5, 2004. Please add new claims 24-41 as follows.

Claims 1-23 (Cancelled)

24. (New) A method for evaluation of a multiple pixel output signal of an electronic image sensor in the course of pattern recognition of the image content of an image of a test body including;

generating a multiple pixel output signal, said signal comprising a window within said image of said test body having a size of n x n pixels;

analyzing the image content in said window by converting said output signal into at least one invariant characteristic value using at least one calculation specification in the form of a two-dimensional mathematical spectral transformation method selected from the group comprising a Fourier, Walsh, Hadamard or circular transformation;

weighting said characteristic value with at least one indistinct affiliation function, said affiliation function defining a relationship between a value range of said characteristic value and a characteristic;

generating a higher order indistinct affiliation function by conjunctive linking of all of said affiliation functions of said characteristic;

determining a sympathetic value from said higher order affiliation function, said sympathetic value defining a degree to which a characteristic in said image is similar to a reference characteristic;

comparing said sympathetic value with a threshold value; and

deciding a class affiliation for said signal from said comparison of said sympathetic value and said threshold value.

25. (New) The method of claim 24 further including dividing the image of said test body into a group of N x N grid-like windows each of said size of n x n pixels; analyzing image content of one of said n x n pixel windows; defining two dimensional spectra from said image content; calculating spectral amplitude values from these two-dimensional spectra; linking together said spectral amplitude values; and forming one said sympathetic value for each said window.

26. (New) The method of claim 24 further including forming only one said sympathetic value for each said window of said size of n x n pixels.

27. (New) The method of claim 24 further including dividing the test body into a group of N x N grid-like windows each of said size of n x n pixels.

28. (New) The method of claim 24 further including determining said sympathetic value using one of a main emphasis and a maximum method.

29. (New) The method of claim 25 further including determining said sympathetic value using one of a main emphasis and a maximum method.

30. (New) The method of claim 24 further including dividing said method into a learning phase and a work phase, using said learning phase for defining and matching at least one of a parameter and a threshold value, and, in said work phase, evaluating said image content of the image of the test body and evaluating said image using results from said learning phase.

31. (New) The method of claim 25 further including dividing said method into a

learning phase and a work phase, using said learning phase for defining and matching at least one of a parameter and a threshold value, and, in said work phase, evaluating said image content of the image of the test body and evaluating said image using results from said learning phase.

32. (New) The method of claim 24 further including providing a learning phase and using said learning phase for teaching said affiliation function.

33. (New) The method of claim 24 wherein each said affiliation function is a unimodal function.

34. (New) The method of claim 24 wherein each said higher order affiliation function is a multimodal function.

35. (New) The method of claim 24 wherein at least one said affiliation function and said higher order affiliation function is a potential function.

36. (New) The method of claim 24 further including generating said higher order affiliation function by processing partial steps of premise evaluation, activation and aggregation, wherein, in said premise evaluation step, an affiliation value is determined for each IF portion of a calculation specification, wherein, in said activation step, an affiliation function is fixed for each IF...THEN calculation specification, and wherein, during said aggregation step, said higher order affiliation function is generated by superimposing all of said affiliation functions formed during said activation.

37. (New) A method for evaluation of a multiple pixel output signal of an electronic image sensor in the course of pattern recognition of the image content of an image of a test body including;

generating a multiple pixel image of said test body to be evaluated;

dividing said image to be evaluated into N x N grid-like windows each having a size of n x n pixels;

analyzing said image context of one of said windows of said size of n x n pixels;

defining two-dimensional spectra from said image contents; and

forming a spectral transformation using a circular transformation.

38. (New) The method of claim 37 further including generating an invariant spectrum.

39. (New) The method of claim 38 further including providing said invariant property adjustable by using transformation coefficients.

40. (New) The method of claim 37 further including performing said circular transformation using real coefficients.

41. (New) The method of claim 37 further including forming associated work coefficients by combining spectral coefficients in groups.